DRAFT 1954

NSC BRIEFING

[redacted] PERFORMANCE ESTIMATE FOR SOVIET JET HEAVY BOMBER

25X1X7

25X1X7

I. [redacted] estimates of performance as of 1957 for the Soviet [redacted] Heavy Jet Bomber have been finalized. For comparative purposes, [redacted]

25X1C 25X1D

25X1X7

[redacted] estimates are herein presented.

25X1X7

25X1C

[redacted]

	Optimum Radius/Range Mission
Take off weight (pounds)	345,000
Bomb load (pounds)*	10,000
Combat radius (N miles)	2,600
Combat range (N miles)	5,100
Target altitude (feet)	43,700
Maximum targets speed (knots)	487

USAF Declass/Release Instructions On File

II. Estimated optimum mission performances with 10,000 lb. bomb loads (multi-megaton weapons) are such that without utilizing forward staging bases (Chukotski) and range extension techniques e.g. in-flight refueling or one-way

25X1D

missions, the [redacted] represents a striking power still generally oriented toward Europe, Asia, and peripheral areas. Thus, the full measure of threat posed by the

* See Background - "Bomb Load Variations"

[redacted] depends upon

25X1D

a. an as yet undemonstrated in-flight refueling capability requiring 18 months to 2 years to develop and

25X1D

b. a Soviet decision to expend in 1957 all 50 estimated operational [redacted] aircraft on missions with the expectation that only half might reach assigned targets.

III. In the aggregate, the mid-1957 picture would appear to be one in which the TU-4 would still figure prominently,

25X1D

with the [redacted] a strong element of strength against

25X1D

Eurasian and peripheral targets, and [redacted] just coming into significant quantity. Given Soviet nuclear capabilities, this is a serious and formidable picture, but it is not particularly alarming with respect to the

25X1D

continental US. However, with series [redacted] production, operational staging bases, and an effective in-flight refueling system, the threat increases sharply becoming very grave by 1958 and 1959.

Background

BOMB LOAD VARIATIONS

By decreasing the bomb load from ten thousand to three thousand pounds and increasing the fuel load accordingly, the

25X1D

combat radius/range of [redacted] may be extended slightly. However, nuclear ordnance weighing 3,000 lb. would be a marginally acceptable strategic weapon. If effectively constructed, a 3,000 lb. weapon could yield an energy equivalent of approximately 20KT--the yield of the Nagasaki bomb. By extravagant, inefficient use of nuclear material this yield could be boosted. Such uneconomical use of nuclear material appears unlikely as the Soviet stockpile of nuclear material in 1957 will still be relatively modest.

Background

Comparison of the Basic Missions of [redacted] and US B-52

25X1D

	[redacted]	US B-52
25X1X7 Take off weight (pounds)	345,000	390,000
25X1C Bomb load (pounds)	10,000	10,000
Combat radius (NM)	2,350	3,160
Combat range (NM)	4,360	6,560
Target altitude (feet)	41,200	46,700
Maximum Target Speed (knots)	492	480